

# A NOTE ON THE MEASUREMENTS OF *TRYPANOSOMA VIVAX* IN RABBITS AND WHITE RATS

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Using the strain of *T. vivax* previously mentioned (*vide* p. 521) a large number of experimental inoculations into laboratory animals was made. Details of these will form part of a future paper dealing more fully with further work done on the trypanosomes infecting two horses from the Gambia previously referred to. This note deals only with four rabbits and two white rats, which were inoculated from goats which presented a pure infection with *T. vivax*. In the case of the rabbits the incubation period varied from eight to sixteen days, and parasites were present in the peripheral blood for periods varying from one day (the shortest) to ten days (the longest). In the two rats the incubation period was five days, and parasites were found in the peripheral blood for only one day. The greatest number of parasites found in the fresh preparation was, in the case of the rabbits, five to a field (objective DD, ocular No. 4), in the case of the rats one to thirty fields.

The trypanosomes presented great activity of movement in fresh preparations, and in stained preparations in dry films gave the measurement results which are given below. As the rats had trypanosomes in the peripheral blood on one day only, and in small numbers, only a small number of specimens (fifty) could be drawn from one rat. For comparison with these, fifty were drawn from one of the rabbits on one day of the disease.

*In the Rabbit.* The average length of the fifty trypanosomes is  $20.8 \mu$ , the maximum parasite measuring  $23.2 \mu$ , and the minimum  $17.4 \mu$ .

*In the Rat.* The average length of the fifty trypanosomes is  $21.1\ \mu$ , the maximum parasite measuring  $26\ \mu$ , and the minimum  $15\ \mu$ .

Table to show percentage incidence according to length in microns of fifty *Trypanosoma vivax* in a rabbit and fifty in a rat.

| No. of Trypanosomes | Animal | Percentage of                                  |   |   |
|---------------------|--------|--|---|---|
|                     |        | Trypanosomes<br>measuring less<br>than $20\mu$ | Trypanosomes<br>measuring<br>between<br>$20\mu$ and $23\mu$ | Trypanosomes<br>measuring<br>$23\mu$ and over |
| 50                  | Rabbit | 22   | 72  | 6   |
| 50                  | Rat    | 22   | 58  | 20  |